

1938

LAYKOLD COURTS




The perfect playing surface

K. M. BYRAM & SON.

9 WELLESLEY ROAD

MONTCLAIR, N. J.



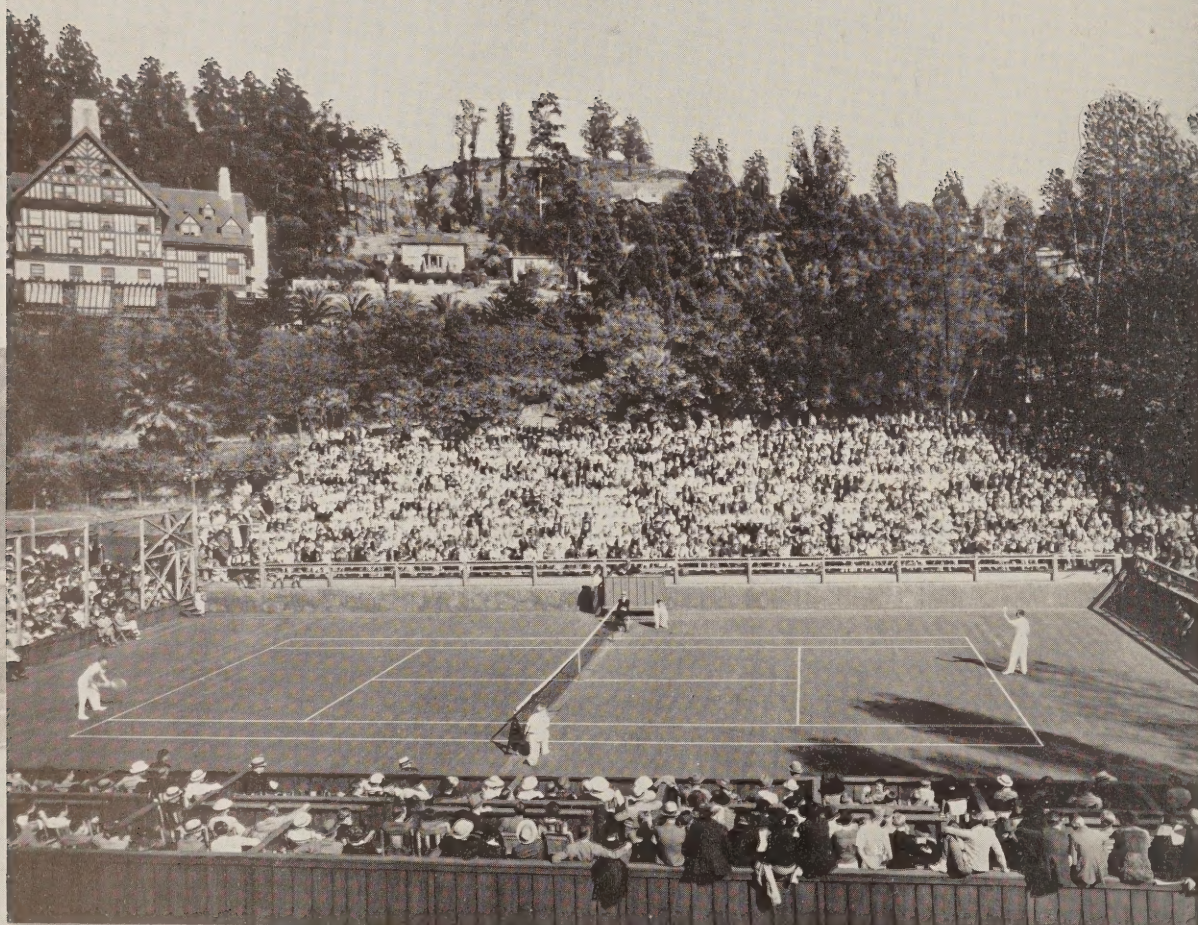
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Laykold

THE PERFECT PLAYING SURFACE



EXHIBITION COURTS, BERKELEY, CALIFORNIA
An important match

THE GAME OF TENNIS, from a modest beginning, has risen to a leading position among sports. More people participate in tennis than any other outdoor game, and each year enrolls new thousands of devotees. Regular play develops coordination of eye, mind and muscle, and improves general health and stamina. No one in good physical condition is either too young or too old to play.

★ *For years the California State and Pacific Coast Tennis Championships have been played on Laykold Courts at the Berkeley Tennis Club. The picture on the preceding page was taken during the Finals of the Men's Singles, in the 45th Annual Pacific Coast Tennis Championships between Mr. Frederick J. Perry, English and American Champion, and Mr. Donald Budge, California State Champion.*

Court Surfaces

Tennis is played on surfaces of many kinds of materials, all of which differ somewhat in playing characteristics, and therefore in the style of game required. Natural soil, sand-clay and turf are surfaces of a soft nature on which the ball action is relatively slow. Cement concrete, bituminous mixtures, and the wooden surfaces sometimes used indoors have hard, tightly bonded surface texture on which the ball action is fast. The softer surfaces wear rapidly under hard play, and require constant maintenance and frequent renewals. They are unplayable after rains until dried out again. Wear is negligible on the hard surface types, and due to the tightly bonded texture which repels water, they are playable soon after rains, and are comparatively free from maintenance.

Laykold Tennis Courts

Laykold Tennis Court surfaces combine resilience with tight and impervious texture, and are distinctive for the type of game which they induce, as well as for their durability and freedom from maintenance. The resilience makes for a game which is not too fast, as on more rigid surfaces, but yet faster than the game which characterizes clay or turf, particularly when not in ideal condition. The pace of the game on Laykold Courts usually suits all classes of players.

There is no displacement of particles under hard playing. The surface remains uniform in texture and true to grade no matter how heavy the use. The frequent maintenance required to keep clay or turf courts in playable condition, is not required on Laykold Courts.

Laykold Tennis Courts possess the following qualities which contribute to the full pleasure of playing tennis. Resilience . . . True Plane Surface . . . Freedom from glare . . . Rapid drying . . . All-weather playability . . . Attractive appearance . . . Durability . . . Economy in upkeep.

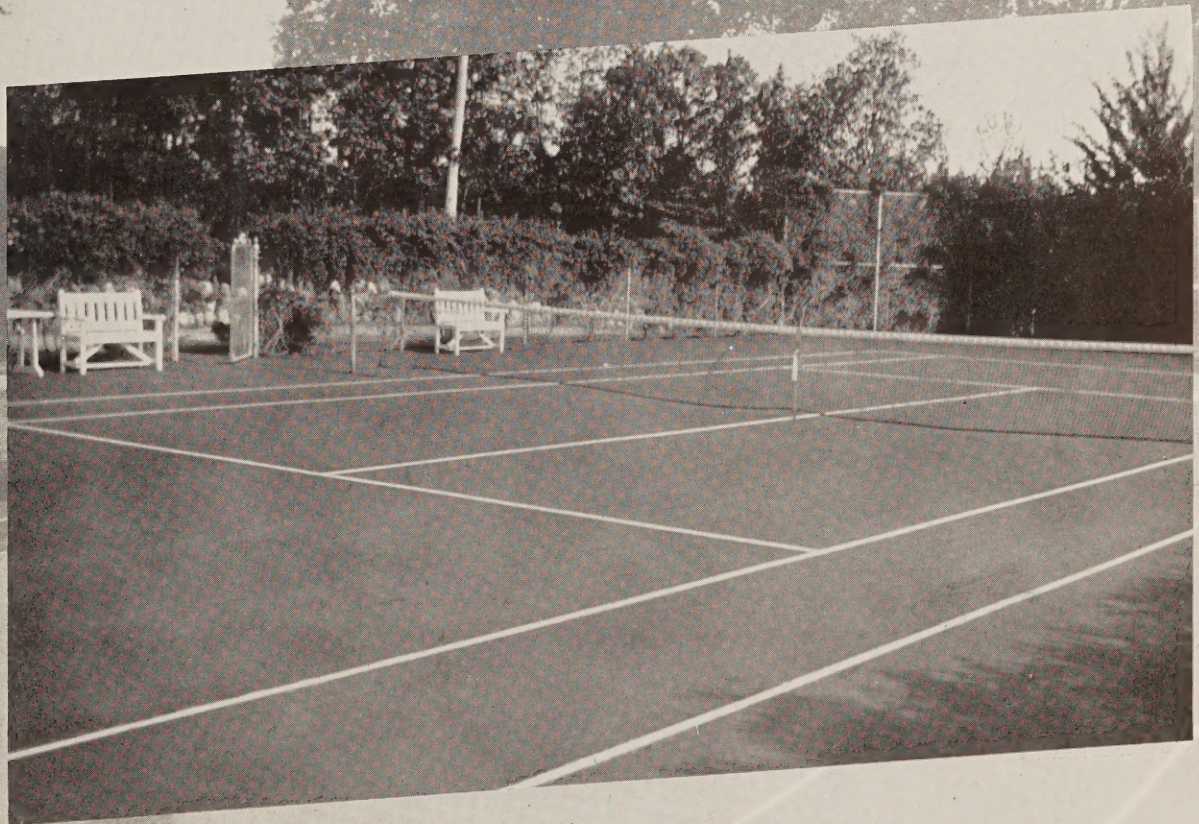
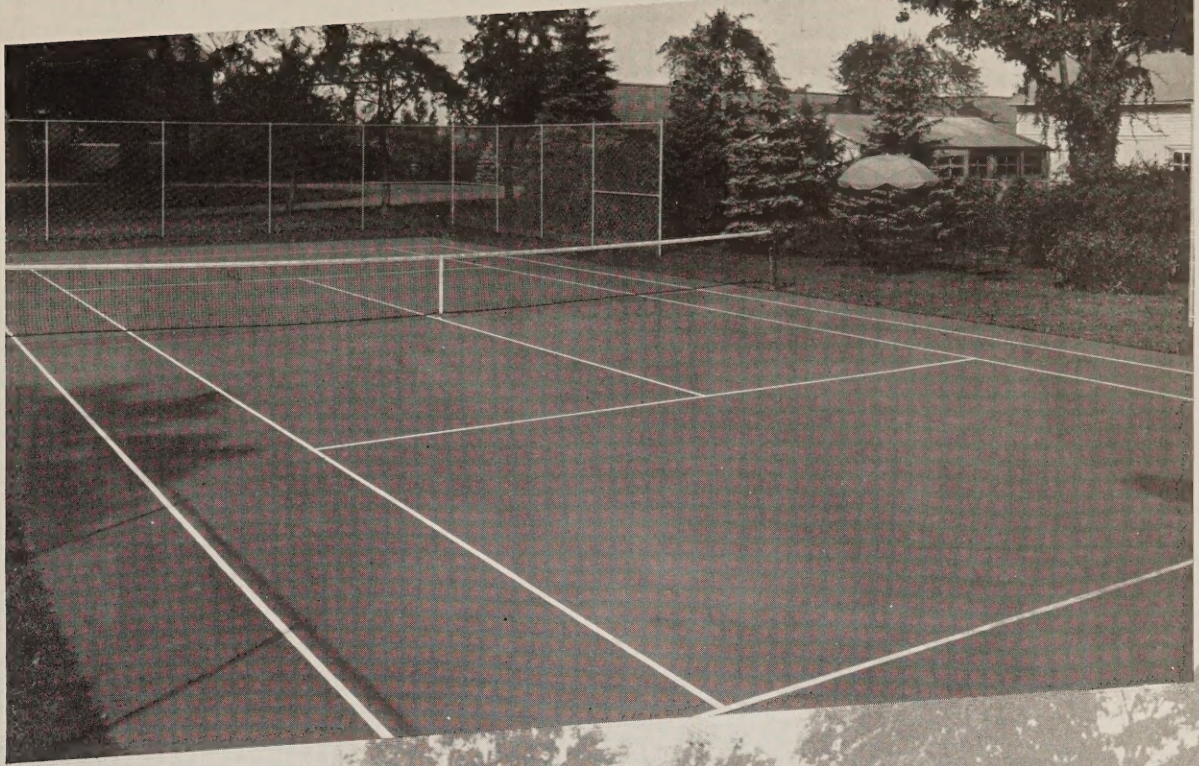
Resilience

All players have experienced the fatigue and discomfort which attend playing on rigid surfaces. This causes many to give up the game after they have passed their youth, whereas with access to courts having less fatiguing surface they would continue to play.

Laykold surfaces are compacted just enough to develop the bond of the asphalt composition, and a perceptible resilience is preserved which has much to do with the popularity of Laykold Tennis Courts. The surface "gives" under the player's weight, reduces effort and fatigue, and thus adds to the pleasure of playing.

True Plane Surface

To anticipate the angle of ball deflection is just as important in tennis play as in billiards. Only a true surface will deflect the ball uniformly. A court surface which is uneven is unpopular with experienced players and does not allow beginners to improve their game.



TYPICAL LAYKOLD COURTS

(Upper) Springfield, Massachusetts

(Lower) Huntington, New York

Laykold Courts are built with a true plane surface. The cold mortar made with Laykold Tennis Court binder is spread and finished between screed strips secured at the true surface grade. There are no depressions to throw the ball off direction. On firm, sound base, the surface remains in true plane. (Unyielding foundation should be provided for Laykold Tennis Court surfaces, just as for all other types.)

Freedom from Glare

Nothing is more annoying in tennis play than glare from a light colored court. Not only does glare interfere seriously with any player's game and the pleasure of playing, but it is often responsible for serious eye strain. The dark color of the Laykold Wear Coat surface dressing is restful to the eyes, and assures instantaneous perception of the ball from all playing positions.

Drying

Laykold Courts dry quickly after rains. The designed grades and slopes are followed exactly in finishing the surface mortar. The smooth impervious surface drains as intended and does not absorb water. A surface slope so slight that it is not apparent is sufficient to drain the water quickly.

All Weather Playability

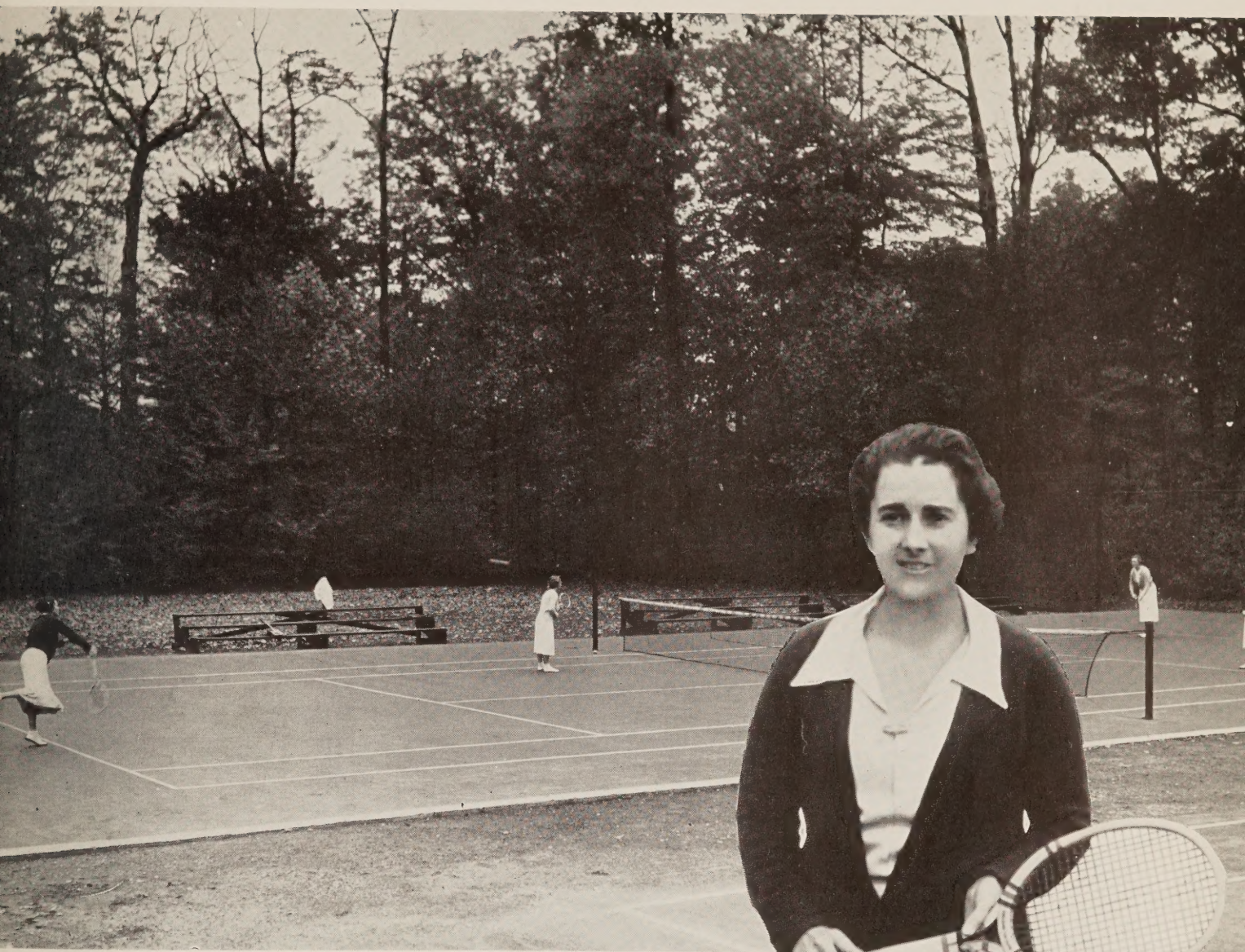
On Laykold Courts the bound of the ball and the sure footing are the same in winter and in summer, and under either dry or humid atmospheric conditions. The surface grips the ball and makes possible the execution of skillful "spin shots." Sureness of foot with no skidding tendency for either shoes or ball enhances the pleasure of the game.

Appearance

Laykold Tennis Courts always have a fresh and neat appearance, which enhances either a formal estate or a vacant city lot.

Durability

The ruggedness of Laykold Courts is proven by hundreds of successful installations throughout the country in both very hot and very cold climates. Sound prin-



MISS MARY K. BROWNE (*in the foreground*) serves to her pupils during a late October session on the Laykold Courts at Lake Erie College, Painesville, Ohio.

MISS MARY K. BROWNE, *three times National Tennis Champion*, instructs tennis at Lake Erie College, Painesville, Ohio. Miss Browne says of Laykold Courts:

"The Laykold Court has proven entirely satisfactory as the best hard surface for play in the late fall and early spring, when all other surfaces are unplayable."

ciples of construction are recommended for the foundation as well as for the surfacing. Preliminary study of the soil and drainage conditions, and the building of sub-base of large stone or other good material, all contribute to permanency. On properly constructed foundation Laykold surfaces endure for years in perfect playing condition, with little or no maintenance.

Laykold Wear Coat, used as finish on the surface of Laykold Courts, is a tough waterproof compound made especially to resist wear. It is applied as final dressing on the smooth Laykold surface, to cover the sand grains and prevent scuffing. Renewal of this dressing in from two to five years, on the areas which receive the hardest use, is normally anticipated.

Economy

Laykold Tennis Courts are economical. The initial cost compares favorably with other well built courts, such as turf and proprietary clay types which require daily attention, and with concrete and hot asphaltic mixtures, which lack resilience.

Laykold Tennis Court surfaces are easy on the tennis balls, shoes and rackets. There is no floating grit to adhere to the felt ball covering and cause wear on the racket strings. The outlay for playing equipment is far less than required for types of surfaces which have unbonded particles.

Owners' Opinion

Laykold Tennis Courts have been built for the past twelve years, and include hundreds of installations for private owners, country clubs, tennis clubs, resort hotels, universities, and at city parks, public and private schools and playgrounds. Countless letters of approval from owners, officials, and players are in our files, a few of which are reproduced in this booklet.

Resurfacing Old Courts

Old courts which have sound foundation, but on which the surface has deteriorated, may be resurfaced with Laykold. To true up an old surface, a Laykold leveling course mixture is placed and covered with a Laykold surface course. On old courts which have true grade, but which are unsatisfactory because of glare or non-resilient surface, the Laykold surfacing often may be spread directly on the old court, thus transforming appearance and playing qualities for minimum outlay.

Striking off a thin layer of the Laykold Surface mixture accurately to grade, directly on the old court surface



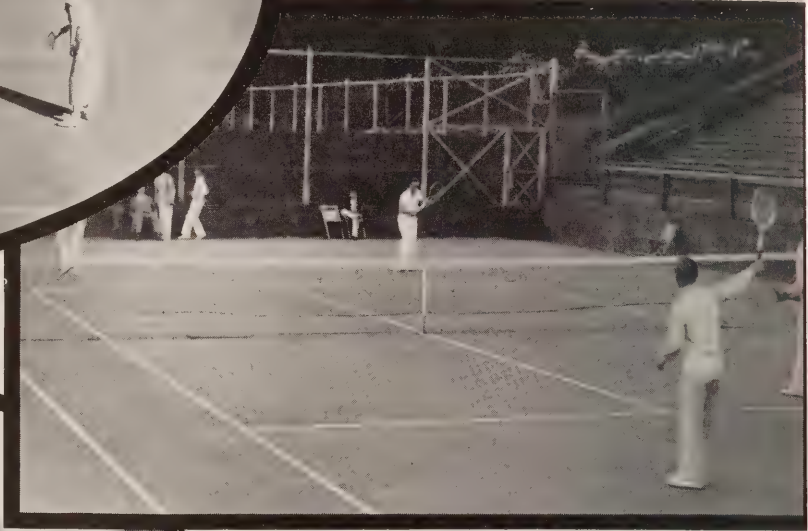
Applying Laykold Wear Coat for surface finish



*Public Courts, Sacramento, California,
resurfaced with Laykold*

Laykold

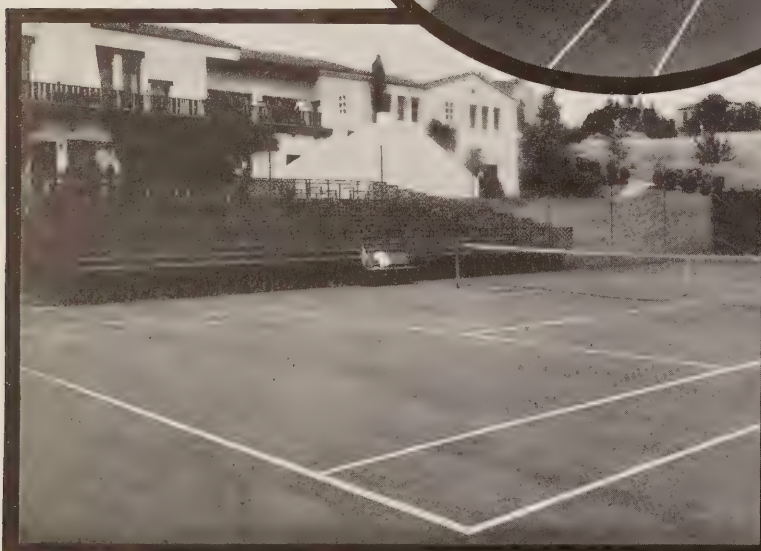
UNIVERSITY OF TEXAS
Austin, Texas



BERKELEY TENNIS CLUB
Berkeley, California



SUTTER TENNIS CLUB
Sacramento, Calif.



PALOMAR TENNIS CLUB
Los Angeles, Calif.



SCHOOL COURTS
Canajoharie, New York

—Donated by Beechnut Packing Co.

Tennis Courts

IN USE THROUGHOUT
THE UNITED STATES



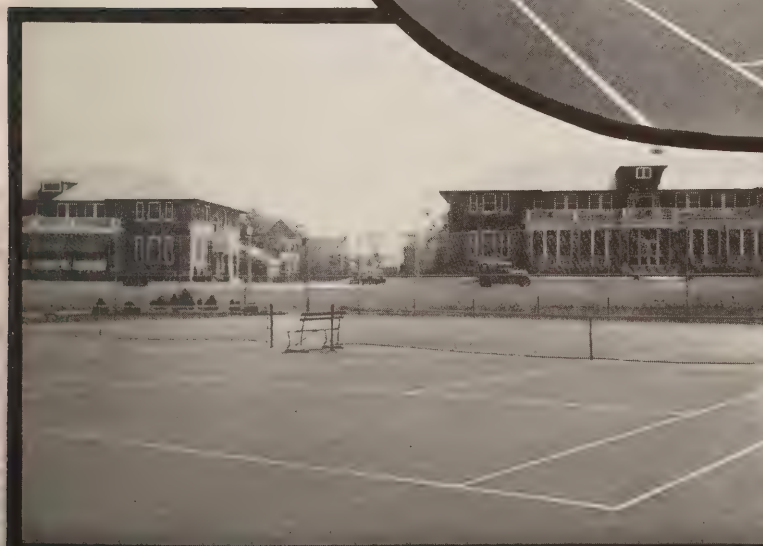
DEL MONTE HOTEL
Del Monte, California



PRIVATE ESTATE
Groton, Massachusetts



EMPLOYEES' COURT
*Hazel Atlas Glass Co.
Oakland, Calif.*



U. S. ARMY POST
Fort Monmouth, N. J.



LANGDON PARK
Washington, D. C.



Setting screed forms for Laykold leveling course



Screed forms set accurately to grade



Mixing equipment

CONSTRUCTION OF A LAYKOLD TENNIS COURT

Size of Court

The standard size for a court for ordinary use is 60 feet by 120 feet. For championship or exhibition courts, additional space outside the marker lines should be allowed. The outside playing lines on the singles court are 27 feet apart, measured across, and 78 feet apart measured lengthwise. For doubles play the width is increased to 36 feet by a second set of lines. Net posts are set 3 feet beyond the outside playing lines on the short axis.

Laykold Tennis Courts located in the open should be built with a light slope in order that rain water will drain quickly. One plane for the entire court area, preferably sloped to one side, is considered most satisfactory. This method of sloping does not affect the relative height of the net above the playing surface from any position. When more than two courts are built side by side, the entire court area may be sloped to one end, to avoid expensive drain construction between courts. The rate of slope may be as much as one inch in ten feet, without being apparent to the eye, or noticeable in play.

Grading

Construction of a solid and well drained foundation requires study by an engineer or tennis court builder of experience. Depth and type of sub-base, drainage measures to prevent run-off from adjacent areas from reaching the site, and the best plan to keep the foundation dry, can be decided only by study of the site. Some general rules, however, apply to such problems.

(a) Courts should not be located where the underlying water table will reach sub-base elevation, or where drainage problems are not definitely solvable.

(b) If the court is located where run-off or seepage from the surroundings may reach the subgrade,

as in a valley between two hills, use of drain tile may be necessary around the outside of the court and perhaps beneath. Tile should be laid well below the sub-grade elevation, with proper slope to drain the water rapidly to a natural outlet.

(c) All top soil, muck, sod, roots, etc., should be excavated from the tennis court area and wasted. The space should be filled with sound material, such as rock, gravel, sand, cinders or other good material selected for natural stability.

(d) If embankment must be placed to reach sub-grade elevation, top soil, muck, sod, roots, etc., should first be excavated down to good underlying soil. Sound material should be selected for refilling, and placed in layers, each layer dampened and compacted.

(e) If a fill of several feet is required, or if the sub-grade lies partly in excavation and partly in embankment, the fill should be allowed to settle and season throughout a winter, and should be again brought to grade and compacted prior to constructing the surface.

(f) A heavy roller should be used for compacting fills and for making subgrade.

(g) An efficient weed-killer compound should be used on the subgrade.

Sub-Base

After the sub-grade has been prepared, settled, and compacted to a true even surface, parallel with the finished grade, grade stakes are set about 10' apart each way over the entire court area, with their tops to elevation for the surface of the sub-base. Where climatic or soil conditions require, a "Telford" type sub-base of heavy rock placed by hand, should be considered. Rock screenings, bank-run gravel, slag, and coarse cinders, are suitable as sub-base materials. Such materials should be spread in courses and each rolled, first dry, then wet. Use an



Screeding the Laykold leveling course



Leveling course placed in alternate panels



Placing the in-between panels



Leveling course finished, screeds removed



Placing Laykold surface course



Screeds are removed and space filled with mixture

efficient weed killing compound on the sub-base to prevent vegetable growth.

Natural soils are sometimes encountered which have practically as good bearing value when wet as when dry. On such materials, which are usually distinguished by high sand or gravel content and a pervious subsoil structure, sub-base construction may perhaps be dispensed with, and the base may be built directly on the natural material.

Base

Above the sub-base the construction should include (a) a well built base* in which stone or gravel is used; (b) a leveling course mixture of coarse aggregate and Laykold Tennis Court Binder; (c) a surfacing course mixture of fine aggregate and Laykold Tennis Court Binder; (d) successive applications of Laykold Wear Coat as surface dressing.

The following types are recommended for base:

Bitumuls Cold Premix, using Bitumuls (mixing grade) and graded aggregates, correctly proportioned for stability, mixed mechanically and thoroughly compacted by rolling.

Bitumuls Penetration Pavement, built with graded crushed stone and Bitumuls (quick-setting grade) constructed by standard roadbuilding methods, without final surface seal.

Bitumuls Stabilized Base, using quarry waste rock or natural gravel which carries from 15% to 25% of clay binder, made resistant to moisture by mixing with Bitumuls Stabilizer in predetermined proportion.

Aggregates for premixed base may be clean crushed rock or gravel, slag or cinders. Loads of stone or mixture should always be re-handled after dumping on the subgrade, in order to insure uniform spreading and consolidation.

**The base for Laykold Tennis Courts should always be of a type which will not shrink, for cracks in the base will extend through the surfacing and mar the court.*

Net Posts

Net posts should be set before the base is built. Foundation for each net post should be a section of 12-inch sewer pipe, embedded vertically in the sub-base, filled with concrete, in the center of which a short steel pipe is set. The upper end of the pipe should be protected by a cap slightly above surface grade, to permit ready insertion and removal of the net posts. An iron to hold the bottom of the center strap of the net should also be permanently set in concrete.

Laykold Leveling Course and Surface

Screed strips are placed accurately to grade, in lines about ten feet apart lengthwise of the court. The leveling course mixture of Laykold Tennis Court Binder and coarse graded aggregates is spread between screed strips, to level up the base to a grade parallel to the finished surface elevations. When this course is thoroughly compacted and hard, a set of narrow screed strips is placed, and the surfacing course mixture of Laykold Tennis Court Binder and fine graded aggregate is spread and finished carefully by screeding and hand troweling. After this course has set, the surface is given several applications of Laykold Wear Coat.

Marker Lines

When thoroughly dry, the surface is ready for painting the marker lines. Their position should be measured accurately, and cut-out templates should be used to insure uniform width. Only a high grade of asphalt base aluminum paint should be used. Oil base paints damage the surface. When the paint is dry, the court is ready for use.

Laykold Tennis Court Binder

Laykold Tennis Court Binder is shipped in iron drums in liquid form. It is a cold liquid emulsified asphalt which was especially developed as binder for



Long handled float keeps workmen off the fresh mixture



Hand troweling Laykold Wear-coat



The surface is rolled lightly

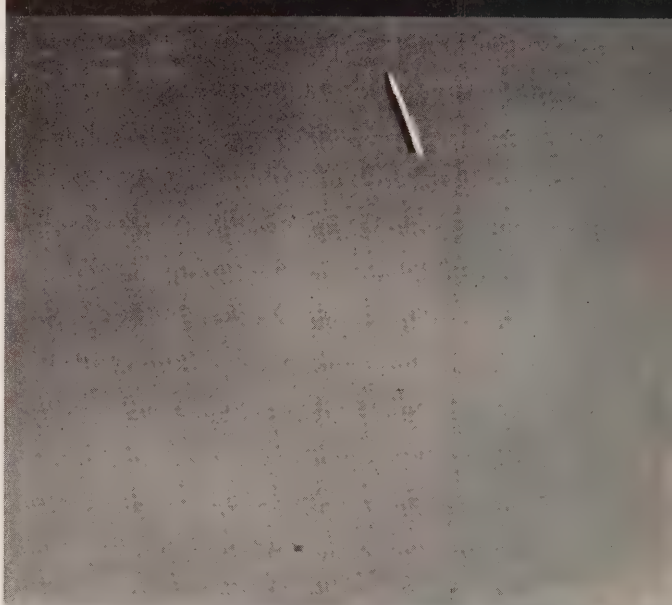
Laykold Tennis Courts. Surfacing mixtures made with it set slowly, and ample time can be taken for perfect finishing to true grade of every part of the surface. Resilient Laykold surfaces have playing characteristics much better suited for real tennis play than any of the rigid pavement types used primarily for street and highway paving, and adopted for tennis courts.

Specifications

The methods of foundation construction described above are general in their application. Definite methods to be followed, and exact thickness of sub-base and base courses, depend upon soil, drainage, and climatic conditions, and are influenced by the materials available. Engineering advice and assistance together with specifications, will be furnished upon application to the nearest office of the American Bitumuls Company, or to local contractors experienced in the construction of Laykold courts.



Final application of Laykold Wear Coat by squeegee



Texture of completed Laykold surface



Laykold Courts ready for play

Owners' and Players' Opinions

DEL MONTE, CALIFORNIA

During the past year your company constructed three tennis courts for the Del Monte Properties Company and one for myself. The courts were constructed with Laykold.

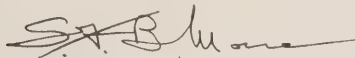
I have played on practically every type of court in existence. I consider the Laykold courts by all odds the best of the so-called hard court type, and in my estimation, as pleasing to play on as any courts I know of.

They cost practically nothing to maintain. Therefore the first cost is virtually the last cost. They are far easier on the feet than other courts of the asphalt type.

I am very glad indeed to recommend them highly, and have done so already to many tennis enthusiasts. I would be pleased to answer any inquiry from St. Louis or anywhere else.

Very truly yours,

DEL MONTE PROPERTIES COMPANY.



President.

BERKELEY, CALIFORNIA


In reply to your request regarding our experience with the Laykold Tennis Courts installed by your firm at the Berkeley Tennis Club.

The surfaces have proven most satisfactory in every respect, their resiliency and neutral color are pleasing to the player, and the small expense of upkeep appeals to the club management.

Our number one exhibition court which you installed two years ago is probably as near perfection as any hard court can possibly be, and is still, as it was when first laid, "the perfect Laykold Court" in the opinion of the world's foremost players who have appeared on it.

Those in close touch with tennis, from William T. Tilden to the ordinary tournament players, and a majority of the officials, are hoping for a standardization of playing surfaces, if and when this is brought about, Laykold should be the standard, in my opinion.

Yours truly,

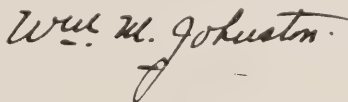


Chairman, House & Grounds Committee,
Berkeley Tennis Club, Berkeley, California

After a great many years of playing on dozens of different kinds of surfaces, it is my opinion that Laykold is far superior to any other surface we have in California. There are several important reasons which lead me to make this statement.

Because of the lack of coarse sand in their composition, Laykold courts result in less wear and tear on tennis balls and shoes. The surface is always smooth and even and very easy on the feet. In addition, the color of the surface is pleasing to the eye. These are points which I think are very important to the average player, as well as those who play tournament tennis.

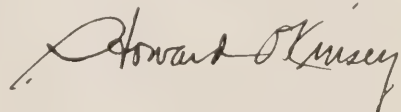
Yours very truly,



I believe Laykold courts provide a surface which is at once not only pleasing in its qualities of smoothness, durability and economy, but seems to me to be the one upon which it is possible to play the most satisfactory game of tennis. The texture of the surface makes possible the use of many different types of strokes.

In the past ten years I have visited nearly every country where tennis is played and have tried nearly every type of court surface. I feel qualified to say that Laykold courts are at least the equal of any I have seen. They require practically no upkeep and their surface gives the ball the same bound the year round regardless of weather conditions.

Yours very truly,



OTHER LAYKOLD PRODUCTS

The designations of Laykold Products are descriptive of the use intended, and include the following:

TILE SET	PRIMER
•	•
FLOOR BOND	ROOF PAINT
•	•
EXPANSION JOINT	WATERPROOFING
•	•
TENNIS COURT BINDER	FIBROUS ROOF PAINT
•	(Black, Red, Green)
TREE SEALING COMPOUND	•
•	INSULATION TROWEL COAT
FLOOR MASTIC BINDER	•
•	ASBESTOS TROWEL COAT
FIBROUS FLASHING	•
•	ROOF TREATMENT
ASBESTOS PAINT	•
(Black, Red, Green)	CRACK FILLER
•	•
WEAR COAT	PLANK SET

AMERICAN BITUMULS COMPANY

also manufacturers "Bitumuls", used in street and highway construction and maintenance. Bitumuls is a cold liquid used as binder in the building of non-skid, waterproof surfaces on highways, driveways, and paths. It is supplied in tank cars or drums in quick setting grades for penetration uses, and in slow setting grades for mixing uses.

AMERICAN BITUMULS COMPANY

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BALTIMORE MARYLAND

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BATON ROUGE LOUISIANA

LOS ANGELES CALIFORNIA

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OAKLAND CALIFORNIA

4525 San Leandro Street

PORTLAND OREGON

Bitumuls Asphalt Sales Co.

400 North Thompson Street

